

64-0266

Executive Registry

HPIC/D-16-6

64-2893

30 MAR 1964

MEMORANDUM FOR: Deputy Director of Central Intelligence

VIA : Assistant Deputy Director (Intelligence) for Management
Executive Director - Comptroller

SUBJECT : Research and Development Project Approval Request for a Duplication Processor Program

REFERENCE : SSCI Memo ER 63-80121, dated 23 December 1963: Approval of Research and Development Activities

In compliance with paragraph 4.b. of the reference, it is requested that the Duplication Processor Program outlined in Annex "A" be approved.

ARTHUR C. LIEBHART
Director

National Photographic Interpretation Center

2 APR 1964

Date

Date

Declass Review by
NIMA/DOD

NPIC/D-46-64

APPROVED:

for 

23 APR 1964

Date

Lieutenant General, USA
Deputy Director of Central Intelligence

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AIRTEX A

Research and Development
Project Approval Request

I. Identification

The Duplication Processor Program will be under the Technical Development Program of the R&D, HPIC at a total estimated cost of [redacted] It was included in the HPIC financial plan for Fiscal Year 1974 at the [redacted] level under Reproduction and Processing Equipment. The additional funds are available within the approved budget.

II. Objectives

The objective of this program is to achieve conceptual and engineering advances in the art and technology of film processing. It will entail a processor investigative program making use of an existing HIA/S processor on a GFE basis as a test vehicle for specialized investigations in a GFE portable clean-room environment adequately equipped and staffed.

The program is designed to provide empirical answers, derived by scientific methods rather than by trial and error, to the many unknowns relating to photographic processors. Major emphasis will be applied to the conceptually new liquid-air bearing principle of film transport that eliminates all physical contact with either the emulsion-surface or the base of the film during the processing cycle. The investigations proposed under this program are specifically oriented toward the problems of processing duplicate films.

III. Background

All wide-film processors to date have required physical contact with the emulsion and film base against a multitude of surfaces as it passes through the processor, causing surface damage and deposition of foreign particles. Until recently these processing defects were of little importance. Now that photographic exploitation has been developed to an exacting science involving identification and measurement of extremely minute targets, it has become imperative to eliminate film damage through equipment development.

IV. Technical Specifications

The specified investigative efforts are directed towards reduction of component sizes, weight, plumbing and power consumption; improvement in efficiency of liquid and air bearings, the drive systems, air squeezers, and solution and air filtration; improvement of methods for splicing, threading, reliability, cleanliness, washing and drying.

V. Contractor and Financial Arrangements

The contract will be placed with the [redacted] on the basis of a [redacted] level-of-effort for a twelve month period with an estimated [redacted] cost for the detachable GZ clean-room enclosure.

Company capabilities, ideas and interest in such a program were investigated through discussion and visits to the major manufacturers of specialized film processors. Among the other companies considered for this program were:



The [redacted] was chosen because the liquid-air bearing concept originated with them and the HDA/5 processor was produced by them. Further, that company has exhibited progressive originality in new processing techniques and concepts and has demonstrated extensive capability in the areas of development and production of photographic processors.

Procurement Division, Office of Logistics, has been informed of this program and is expecting to undertake contract negotiations during the month of March.

VI. Coordination

Information concerning the proposed program has been disseminated within the Agency and to other components of the community through the EPIC Technical Development Committee and the Semi-annual EPIC Joint Procurement Meeting held 28 February 1964.

VII. Security

The program is to be negotiated on an [redacted] basis, and both association with the sponsor and the equipment itself is to be classified.

The clean-room enclosure utilized for this program will be closed to all personnel except those assigned to the program who have proper security clearances and who have a need-to-know of work conducted therein.

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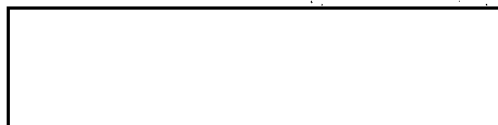
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1. Film Processor Development 1
Program to be conducted for a
period of 12 months in a GFE
clean-room environment. Program
to cover Development Objectives,
dated 2 March 1964, Attached.



NOTE: The HTA/5, now being held
by [redacted] will be used
as a GFE test vehicle. The port-
able clean-room is to be procured
from [redacted]

[redacted] and is to be approximately
1800 square feet, complete with
all electrical plumbing, heating,
air conditioning and filtering
fixtures.

NPIC reserves the right to
approve specifications and
quotation for clean-room prior

The project engineer has dis-
cussed the procurement of the

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requested that efforts be made to
limit the profit to "level of
effort" contract only.